



A Framework for Smart & Strategic Transportation Investment in Maryland

Making Sustainable Investments that Provide
Short- and Long-Term Savings and Benefits to Our Communities



Richard E. Hall, AICP, Secretary
Maryland Department of Planning

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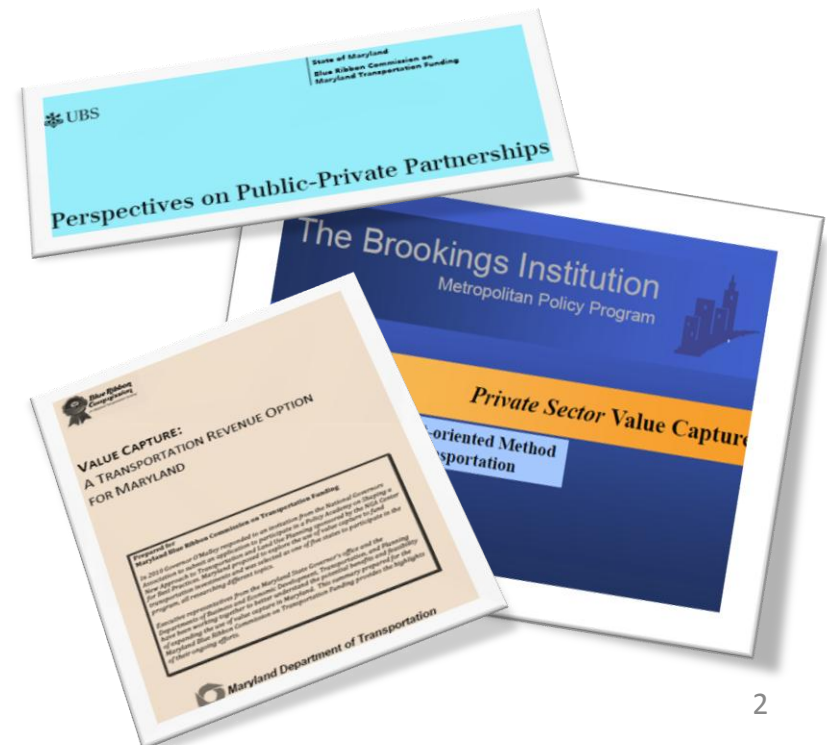


BACKGROUND

- **Funding shortage challenge in Maryland isn't new**
- **Commission has recommended numerous measures to generate new revenue, but current realities make it difficult to raise taxes and fees**
 - Economic recession
 - Political/public sentiment
 - Rising gas prices
- **Commissioners have heard about several innovative funding tools**
 - Tolls and road pricing
 - Public-private partnerships
 - Value capture

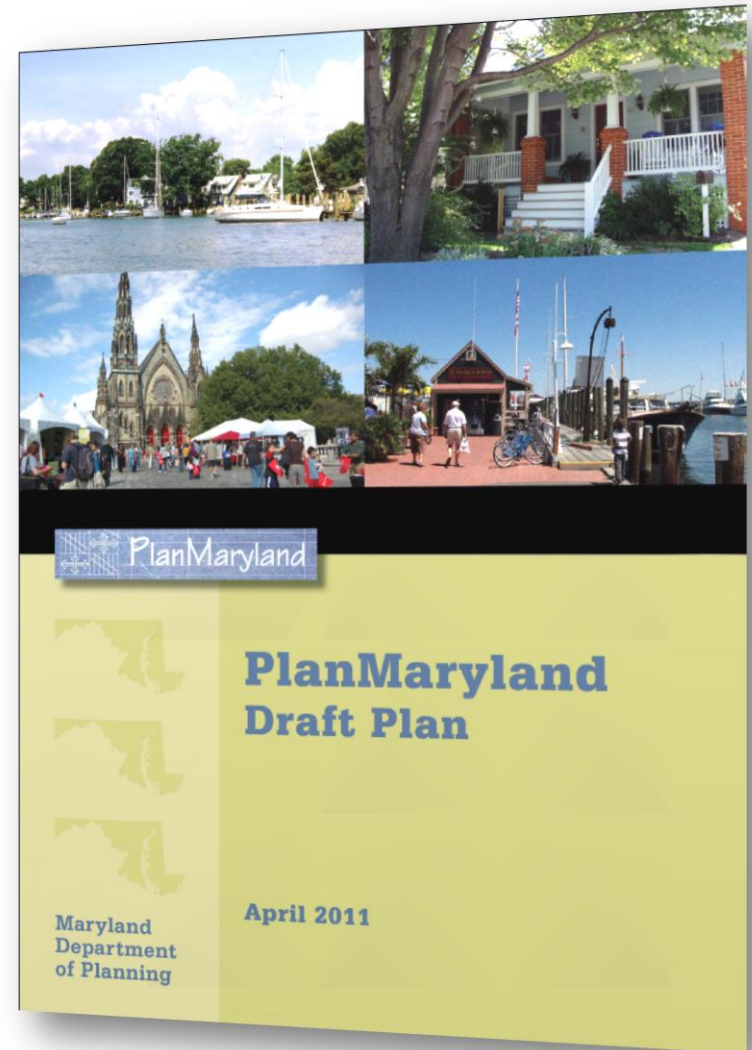
	Recommended Annual Funding Increase
2003 Hellman Commission	\$300 million
2010 Blue Ribbon Commission	\$800 million

Source: Maryland Department of Transportation



STRATEGIC CONTEXT

- What is new is PlanMaryland.
- It's Maryland's blueprint that lays out the policies to guide state agencies more toward smart growth.
- It creates a process to better align state policies and capital spending priorities with the principles of sustainability and smart growth.
- As drafted it establishes clearly defined geographic areas where growth and preservation will be treated as highest priorities.
- It also provides predictability and direction for local jurisdictions by identifying state policy areas for growth and preservation.
- Local jurisdictions will be asked to review and consider the PlanMaryland geographies when updating their own plans and will be provided opportunity to designate local areas that are consistent with State planning areas.



TODAY'S TOPIC: SMART & STRATEGIC INVESTMENT

- **Strategic investments in transportation are an important part of defining and closing our funding gaps**
 - Defining our obligations, roles, and responsibilities
 - Reducing future expansion and maintenance costs
 - Achieving multiple state policy goals
 - Yielding better return on investment and options for our future

Today we'll answer the following questions:

What is Smart & Strategic Investment?

Why do we need Smart & Strategic Investment?

How will Maryland benefit from Smart & Strategic Investment?

What is Smart & Strategic Investment?

- 1. Making investments that support smarter, more sustainable growth**
 - Prioritizing investments that support growth in designated growth areas
 - Minimizing negative impacts in rural and sensitive areas
- 2. Enhancing our transportation infrastructure to:**
 - Provide greater choice in personal travel
 - Create pedestrian-friendly and human-scaled built environments
 - Conserve and preserve our rural and natural resources
- 3. Managing travel demand to reduce vehicle travel and congestion**
 - Implementing transportation demand management (TDM) tools (e.g. HOV/carpool facilities, road pricing/tolls, community design)
- 4. Optimizing existing facilities and systems**
 - Giving priority to system preservation projects
 - Using new technologies to increase efficiency of existing systems

Why do we need Smart & Strategic Investment?

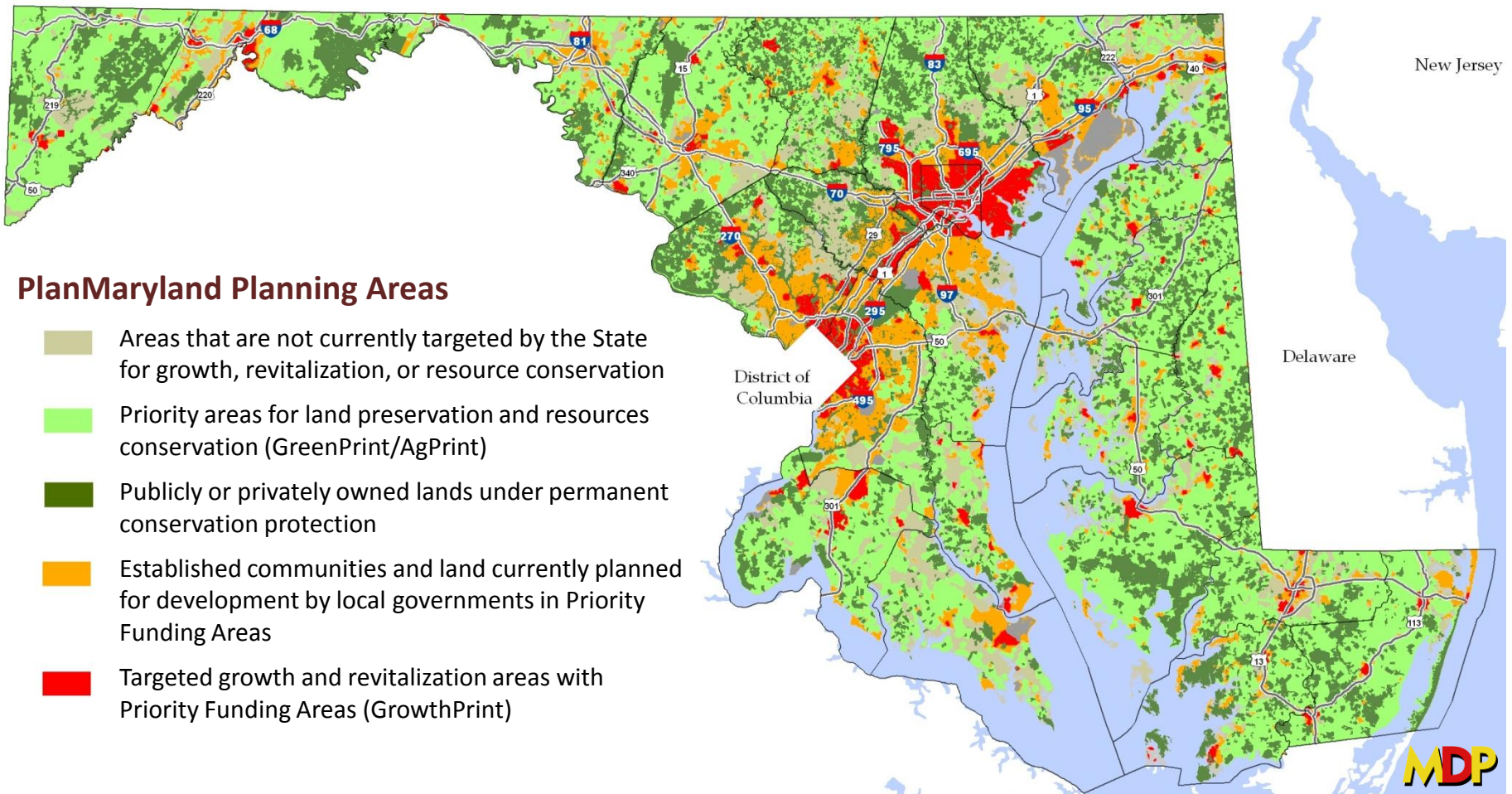


**To secure Marylanders' health, safety, and welfare...
we must make strategic investments to support our
economy, our communities, and our environment.**



Why do we need Smart & Strategic Investment?

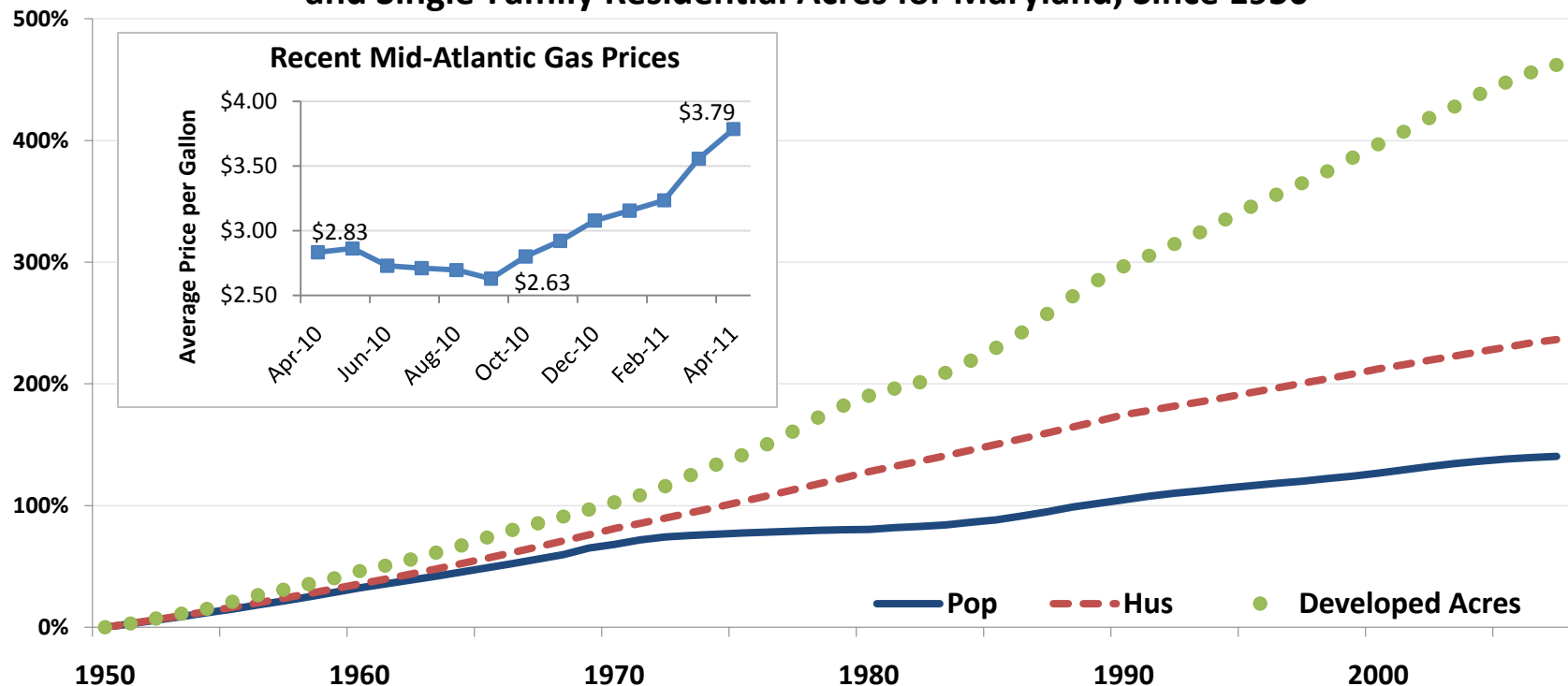
A physical plans allows relationships to be seen and strategic choices to be made.



Why do we need Smart & Strategic Investment?

To ensure a sustainable economy in which our residents and businesses can thrive

Cumulative Percent Change in Population, Housing Units and Single-Family Residential Acres for Maryland, Since 1950

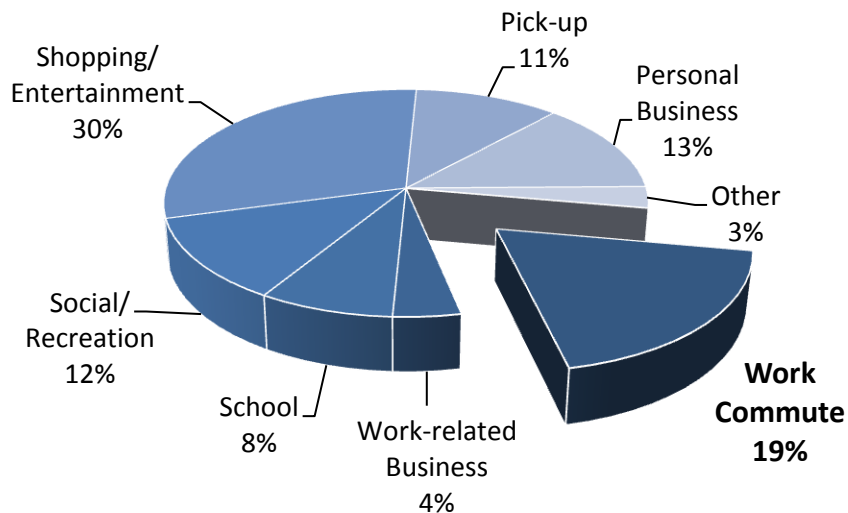


Why do we need Smart & Strategic Investment?

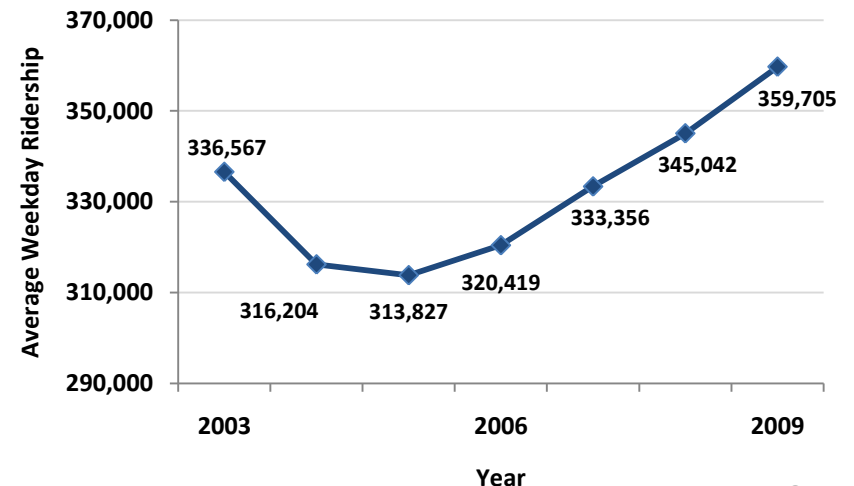
To provide alternatives for more trips and more people

- 77% of Marylanders drive alone to work
- More than 80% of trips are non-work, “lifestyle” trips
- Daily transit ridership was up 15% between 2005 and 2009
- By 2030, 1 in 3 households will be headed by someone 65+ years old

Daily Trips by Purpose, DC Metro



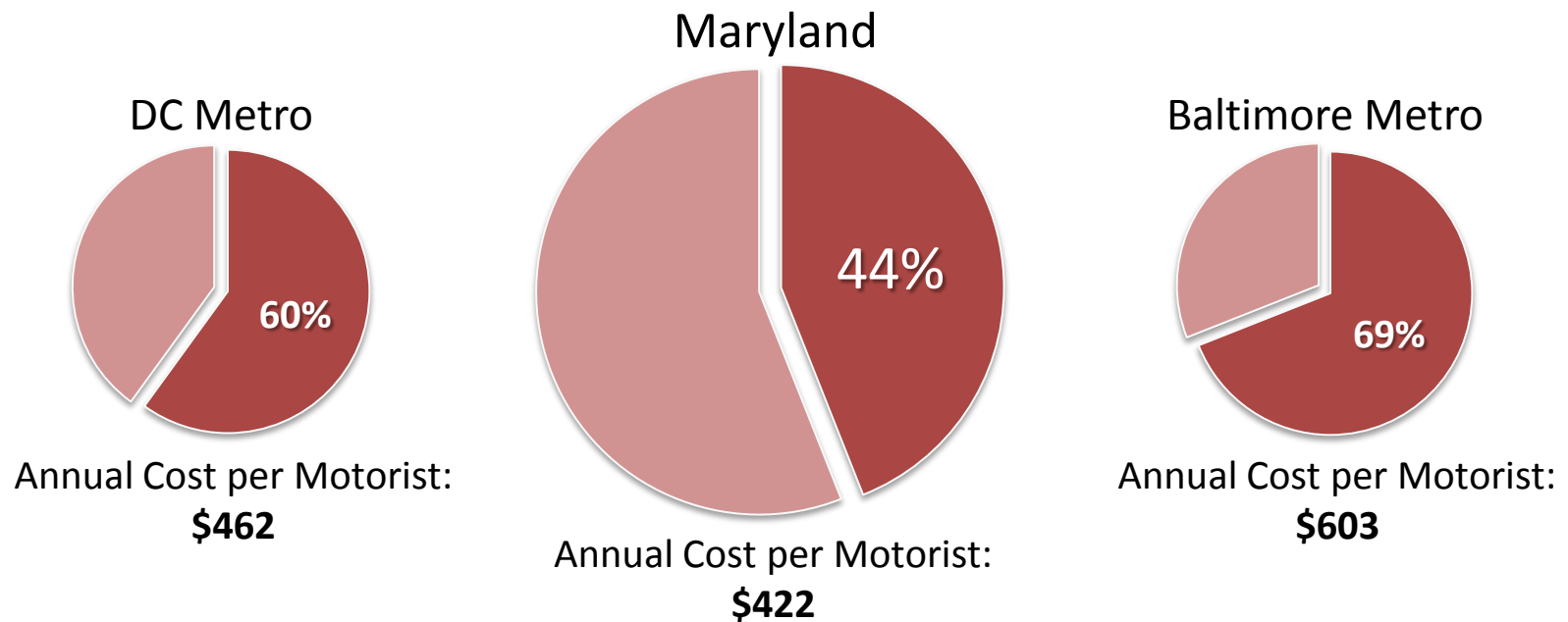
Average Weekday Transit Ridership in Maryland



Why do we need Smart & Strategic Investment?

To improve safety and save Marylanders money

Share of Major Roads (State and Local) in Poor or Mediocre Condition



How will Maryland benefit from Smart & Strategic Investment?

Savings on Personal and Household Transportation Costs

- More efficient land use patterns reduce Marylanders' cost of driving

Annual Household Auto Costs Under Four Development Densities

<i>Residential Density:</i>	0.2 units/acre	1.0 units/acre	2.7 units/acre	4.5 units/acre
Autos per household	3.4	2.3	1.8	1.6
VMT per household	28,822	18,603	15,100	13,233
Auto Costs				
Auto ownership (\$/year)	\$11,669	\$7,894	\$6,075	\$5,491
Auto operation (\$0.134/mile)	\$5,098	\$3,291	\$2,670	\$2,340
<u>External costs (\$0.10/mile)</u>	<u>\$3,804</u>	<u>\$2,455</u>	<u>\$1,993</u>	<u>\$1,746</u>
Total Costs	\$20,571	\$13,640	\$10,738	\$9,578
Incremental Cost of Reduced Density	\$6,931	\$2,905	\$1,160	n/a
Avg. of Incremental Costs:	\$3,666			
Incremental Cost per household:	\$1,833 per household			
Incremental Cost per vehicle-mile:	\$0.121 per vehicle-mile			

A VMT decrease of
10,000 miles per capita
=
\$1,200 in annual
savings for every
Marylander

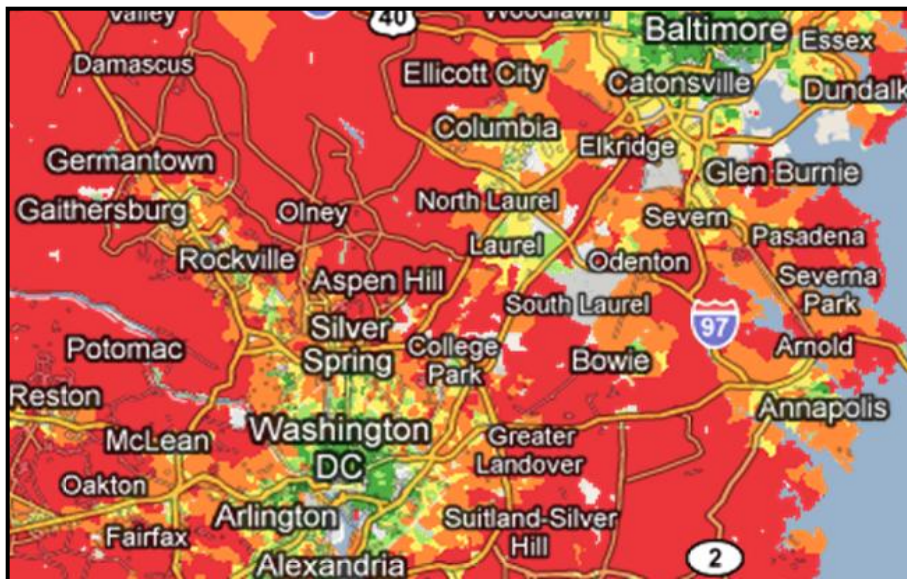


How will Maryland benefit from Smart & Strategic Investment?

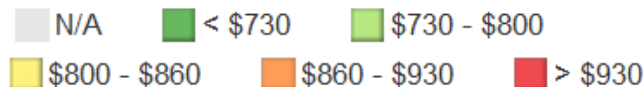
Savings on Personal and Household Transportation Costs

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Monthly Household Transportation Costs



\$ per month:

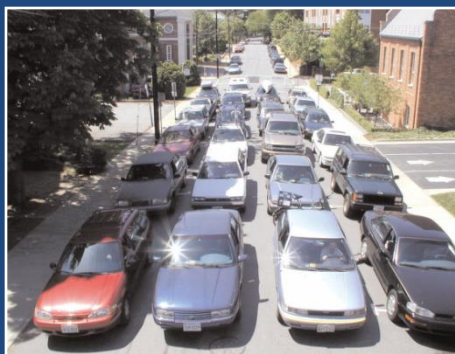


Monthly Household Transportation Cost	
Outer Suburban (Germantown)	\$1,413
Inner Suburban (College Park)	\$972
Urban Core (Silver Spring)	\$869

How will Maryland benefit from Smart & Strategic Investment?

Cost Savings on Public Infrastructure

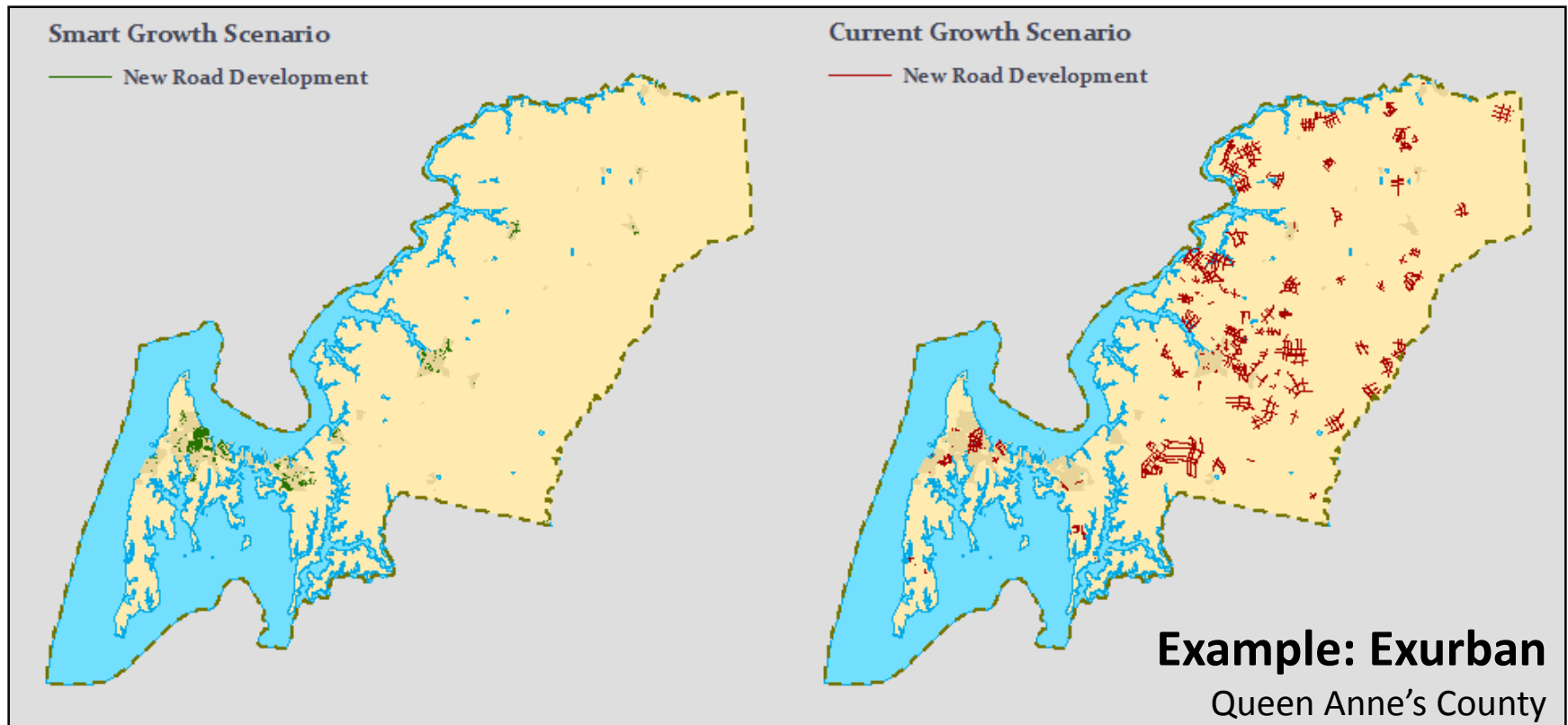
- Transportation investments that support compact development can reduce expenditures on roads and other public infrastructure
- System preservation investments now save expensive long-term repair and replacement costs later
- Transit vehicles and non-motorized modes make better use of scarce road space



How will Maryland benefit from Smart & Strategic Investment?

Cost Savings on Public Infrastructure

- How might savings on local road development reduce HUR needs?



How will Maryland benefit from Smart & Strategic Investment?

Cost Savings on Public Infrastructure

- How might savings on local road development reduce HUR needs?

Public Infrastructure Costs: Current Trend vs. Smart Growth by 2030

	Current Policy Scenario	Smart Growth Scenario	% Savings with Smart Growth
Roads			
Miles of Road	12,349	7,896	36%
New Construction Costs	\$103 billion	\$74 billion	28%
Maintenance/Repair Costs	\$1,063 million	\$680 million	36%
Water/Sewer			
Total Costs	\$2.17 billion	\$2.11 billion	3%
Schools			
Construction Costs	\$3.54 billion	\$3.19 billion	10%

Source: Maryland Department of Planning

- Potential savings of:**
 - \$29 billion in new road construction costs
 - \$383 million in road maintenance costs
 - \$406 million in water/sewer and school construction costs

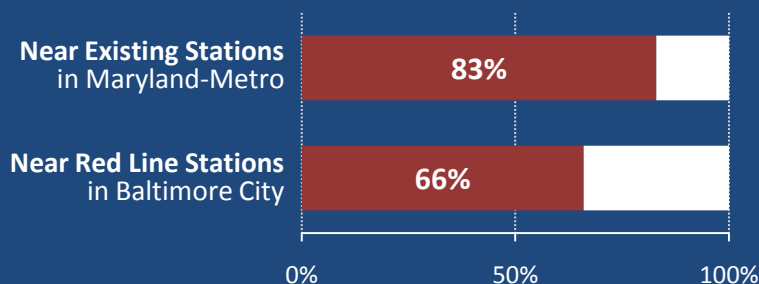
How will Maryland benefit from Smart & Strategic Investment?

Short- and Long-Term Economic Growth

TRANSIT-ORIENTED DEVELOPMENT

Transit doesn't just provide new transportation options, it creates development opportunities in the form of transit-oriented development.

Share of Total Residential Growth by 2030



Source: Baltimore City Planning Department, Central Maryland Transportation Alliance, Maryland Department of Planning.



Jobs Created per \$1 Million in Public Spending on Transportation Projects

	U.S. 2004	U.S. 2009	U.S. 2011 ARRA
Roads and Bridges	-	-	2,400 hrs*
New construction	34.6	30.1	-
Repair and maintenance	37.7	35.1	-
Transit	41.0	40.6	4,200 hrs*
Job Creation Potential:			
• Transit Projects vs. Road/Bridge Projects	19% more jobs	35% more jobs	75% more job-hours
• Repair/Maintenance vs. New Construction	10% more jobs	17% more jobs	-

* ARRA figures are given in job-hours, and do not include indirect and induced jobs.

- Labor-intensive repair and maintenance projects tend to create more jobs than capital-intensive new construction projects
- Transit and bicycle/pedestrian projects tend to create more jobs than road and bridge projects

How will Maryland benefit from Smart & Strategic Investment?

Economic Growth & Transportation Efficiency

TRANSIT-ORIENTED DEVELOPMENT: White Flint Metro, Montgomery County



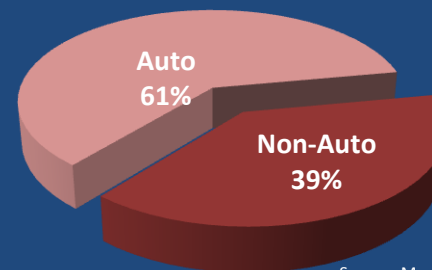
Planned TOD around the White Flint Metro station in Montgomery County will transform 430 acres of strip shopping centers and surface parking lots into a compact, mixed-use urban center.

Three major mixed-use projects will provide more than 3,200 housing units and 3 million sq ft of commercial spaces with various smart/green features .

Transit, bicycling, and walking are expected to accommodate 39% of daily trips within the TOD area.



**Anticipated Share of Generated Trips by Mode,
White Flint Metro TOD**



Source: Montgomery County Planning

SUMMARY

- **Maryland needs a strategic framework for developing and guiding a comprehensive transportation investment strategy.**
- **We must understand the full costs associated with our investments, as spending in one area can limit or affect spending in other areas.**
- **Costs and benefits should be used to target strategic investments.**
- **A well-devised investment strategy will reassure Marylanders that new transportation revenues will be spent wisely.**